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EXAMINER	
CHAN, KAWING	
ART UNIT	PAPER NUMBER
2837	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/590,299	CABALLERO ET AL.	
	Examiner	Art Unit	
	Kawing Chan	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 January 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Amendments and Applicant Arguments submitted on 01/26/10 have been received and its contents have been carefully considered. The request for reconsideration of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claims 1-11 are pending for examination.

Response to Arguments

2. In response to applicant's argument "Applicant's claims involve automatically moving an elevator car to a predetermined parking position in response to a pit access control signal. There is no such control signal in either of the *Sansevero* or *Vialonga* references. Without that, there is no possible prima facie case of obviousness because the claimed signal is missing and the claimed response to such a signal is also missing", the examiner acknowledged that only limitations in claims 7 and 10 involve "automatic movement of the elevator car, and Vialonga discloses the "automatic movement of the elevator car" in response to the pit access control signal (generated by key access switch 30) in Col 2 lines 18-37. In the first mode of operation, the elevator car is moved to a specific floor (e.g. lowermost landing) when key access switch is operated by technician. In the second mode of operation, the elevator car is moved up or down when the access switch is operated by the technician. In both situations, the

elevator car is moving automatically in response to the activation of the key access switch 30.

3. In response to applicant's argument "A cab access signal is not the same as a pit access control signal", the examiner disagrees with applicant's argument. Vialonga discloses the key access switch 30 controls the elevator to move up or down in order for technician to access to the pit floor; therefore, the key access switch used to generate the pit access control signal in Vialonga is essentially the same as the engineer interface used to generate pit access control signal in the invention.

4. In response to applicant's argument "it is not possible to find an automatic movement of an elevator car to a predetermined parking position responsive to a pit access control signal in the Vialonga reference", the examiner introduces a new ground of rejection (Sansevero in view of Vialonga and Ach) to disclose the claimed limitation. Sansevero and Vialonga disclose automatically moving an elevator car to a position responsive to a pit access control signal (i.e. second mode of operation disclosed in Vialonga). Sansevero and Vialonga fail to disclose the location is a predetermined parking location. However, Ach discloses an elevator is parked at a predetermined location above the lowermost landing (i.e. one floor above the lowermost position). Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Vialonga with the teachings of Ach so as to be able to move the elevator car to a predetermined parking position above the lowermost landing. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods

with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention was made.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 4-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sansevero (US 6,223,861 B1) in view of Vialonga (US 6,357,553 B1) and Ach (US 6,247,559 B1).

In Re claim 1, Sansevero discloses an elevator system comprising:

- A hoistway (Figure 1);
- An elevator car (11) that is moveable vertically within the hoistway (inherently disclosed);
- A plurality of landings opening into said hoistway (Figure 1); and
- A pit (9) located below a lowermost landing (Figure 1); and

Sansevero fails to disclose an engineer interface located at or near the lowermost landing, the engineer interface generating a pit access control signal for

moving the elevator car to a predetermined parking position above the lowermost landing responsive to the pit access control signal thereby allowing access to said pit.

However, with reference to Figure 1, Vialonga discloses an elevator system comprising an engineer interface (30) located at lowermost landing (Col 2 lines 15-17: e.g. lowermost level) generating a pit access control signal (Abstract: signal generated by key access switch) for moving the elevator car to a predetermined parking position (e.g. a specific landing position) responsive to the pit access control signal thereby allowing access to said pit (first mode: bring the car to the desire landing, and second mode: generate signal to move the car up and down depending the needs) (Col 1 line 64 to Col 2 line 37).

Vialonga fails to disclose the predetermined parking position is above the lowermost landing.

However, Ach discloses the predetermined parking position is above the lowermost landing (Col 2 lines 15-21).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Sansevero with the teachings of Vialonga and Ach, since it is known in the art to utilize engineer interface located near the lowermost landing so as to be able to direct the elevator car to move to the lowermost landing position, and it is known in the art to park the elevator car at least one floor above the lowest floor so that mechanic is easily accessible fro the hoistway pit for maintenance work.

In Re claim 4, Vialonga discloses the engineer interface (30) comprises a key switch.

In Re claim 5, with reference to Figure 1, Vialonga discloses the engineer interface is located adjacent an elevator call button (28) at the lowermost landing (Col 2 lines 7-17).

In Re claim 6, Sansevero discloses a logical means (top and bottom inspection speed limit switches 16, 17) for preventing movement of said car when in said parking position (Abstract).

In Re claim 7, Sansevero discloses a method of operating an elevator system having a hoistway (Figure 1), an elevator car (11) vertically moveable within the hoistway (inherently disclosed), a plurality of landings opening into the hoistway (Figure 1), and a pit (9) located at the bottom of the hoistway beneath a lowermost landing (Figure 1).

Sansevero fails to disclose the step of generating pit access control signal and the step of automatically moving said car in response to said pit access control signal.

However, with reference to Figure 1, Vialonga discloses a method of operating an elevator system comprising the steps of:

- Generating a pit access control signal (Abstract: signal generated by key access switch) using an interface (key access switch 30) outside the hoistway near the lowermost landing (Col 2 lines 15-17: e.g. lowermost level);

- Automatically moving said car to a predetermined parking position (first mode: direct the car to a specific landing) in response to said pit access control signal.

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Sansevero with the teachings of Vialonga, since it is known in the art to utilize engineer interface located near the lowermost landing so as to be able to direct the elevator car to move to the lowermost landing position.

Vialonga fails to disclose the predetermined parking position is above the lowermost landing.

However, Ach discloses the predetermined parking position is above the lowermost landing (Col 2 lines 15-21).

Since Vialonga teaches technician can adjust location of the car (when the car is located at lowest level after operation of first mode) by using access switch (30) in inspection mode (second mode operation), and Ach provides teaching of setting a predetermined parking position above the lowermost landing, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Sansevero and Vialonga with the teachings of Ach, so as to be able to park the elevator car at least one floor above the lowest floor so that mechanic is easily accessible from the hoistway pit for maintenance work.

In Re claim 8, Sansevero discloses a computer readable storage medium containing instructions (e.g. software module as shown in Figure 2) for operating an elevator system comprising:

- Instructions for directing a controller to receive a pit access control signal from an engineer interface (i.e. test 36: set normal/inspection switch switched to inspection);
- Instructions for determining that the elevator car has reached the predetermined parking position (Abstract: a position which leaves a person ample room from the hoistway overhead or pit floor);
- Instructions for generating a control signal to said elevator machine to halt further movement of the car until a further control signal (tests 37 & 47: when normal/inspection switch switched to normal) is received from said interface;

Sansevero fails to disclose the instructions for generating a second control signal to an elevator machine to move said car upwardly into a predetermined parking position;

However, Vialonga discloses the step of generating a second control signal to an elevator machine to move said car upwardly (Col 2 lines 29-37: second mode operation).

Vialonga fails to disclose the predetermined parking position is above the lowermost landing.

However, Ach discloses the predetermined parking position is above the lowermost landing (Col 2 lines 15-21).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Sansevero with the teachings of Vialonga and Ach, since it is known in the art to utilize engineer interface located near the lowermost landing so as to be able to direct the elevator car to move to the lowermost landing position, and it is known in the art to park the elevator car at least one floor above the lowest floor so that mechanic is easily accessible fro the hoistway pit for maintenance work.

In Re claim 10, Vialonga teaches the elevator car is able to move as desired in inspection mode (first mode: move the car down to lowest floor & second mode: move car up or down as desired) and Ach teaches the elevator car is parked at least one floor above lowest floor in inspection mode, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified Vialonga with the predetermined parking position disclosed by Ach so as to be able to move the elevator to a predetermined position to allow mechanic to have ample room to enter into the pit floor. In addition, it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. *In re Venner, 120 USPQ 192*

In Re claim 11, Vialonga discloses the step of moving the elevator car to the lowermost landing prior to the step of automatically moving the car (first mode).

7. Claims 2-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sansevero (US 6,223,861 B1) in view of Vialonga (US 6,357,553 B1) and Ach (US 6,247,559 B1) as applied to claim 1 above, and further in view of Conchello (WO 02/096791 A1).

In Re claim 2, Sansevero, Vialonga and Ach have been discussed above, but they fail to explicitly disclose a locking means for locking the car to a guide rail.

However, with reference to Figures 1 and 3, Conchello discloses a locking means (1-5) for locking the car to a guide rail (6) (Abstract).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Sansevero, Vialonga and Ach with the teachings of Conchello, since it is known in the art to utilize a locking means for locking the car to a guide rail so as to be able to protect the mechanic who enters the pit to inspect the elevator car during maintenance.

In Re claim 3, Conchello discloses the locking means are accessible from beneath the car (since pit floor is always beneath the car and part of the locking means 4.2 is disposed in the lower part of the pit; therefore, Conchello inherently discloses the locking means could be accessed from beneath the car) (Abstract).

In Re claim 9, Conchello discloses a manually moveable lock member (3) positioned on an underside of the elevator car (since the bar 3 is engaged with the section 4 located at the lower part of the pit, the bar has to be on the underside of the car) and a locking plate (4) at the predetermined parking position (lower part of the pit), the manually moveable lock member (3) engaging the locking plate responsive to

manual movement into a deployed position where the manually moveable locking member and the locking plate prevent movement of the elevator car out of the predetermined parking position (Abstract).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kawing Chan whose telephone number is (571)270-3909. The examiner can normally be reached on Mon-Fri 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. C./
Examiner, Art Unit 2837

/Walter Benson/
Supervisory Patent Examiner, Art Unit 2837